

**ABSTRACT**

Systems and methods deploy an electrode structure in contact with the tissue region. The electrode structure carries a sensor at a known location on the electrode structure to monitor an operating condition. The systems and methods provide an interface, which generate an idealized image of the electrode structure and an indicator image to represent the monitored operating condition in a spatial position on the idealized image corresponding to the location of the sensor on the electrode structure. The interface displays a view image comprising the idealized image and indicator image. The systems and methods cause the electrode structure to apply energy to heat the tissue region while the view image is displayed on the display screen.